



## ANNUAL UPDATE FOR CALENDAR YEAR 2020

SB 181

COMPLIANCE WITH WATER QUALITY STANDARDS AND CLASSIFICATION

JANUARY 27, 2021

This update to the Water Quality Control Commission summarizes the activities of the Division of Oil and Public Safety’s Storage Tank Program related to SB 181 for calendar year 2020.

### ***Technical Activities for Calendar Year 2020***

Number of Open Confirmed Releases .....	581
Number of 2020 Confirmed Releases .....	355
Number of Cleanups Initiated .....	296
Number of Cleanups Completed .....	355

### ***State Fund Information for Calendar Year 2020***

Number of Reimbursement Applications Reviewed by the PST Committee.....	130
Number of Supplemental Reimbursement Applications Approved by Staff.....	734
Reimbursement by the PST Committee (including State Lead/LUST Trust).....	\$37,309,514

### ***Enforcement Activities for Calendar Year 2020***

Number of Notices of Violations Issued.....	880
Number of Notices of Violations Resolved.....	614
Number of Enforcement Orders Issued.....	10
Number of Enforcement Orders Resolved.....	5
Number of Tanks with Delivery Prohibition.....	6

### ***Summary of Statistics***

The number of open releases at the beginning of January 2020 was 730. However, by December 31, 2020, OPS had closed 355 open releases. As anticipated the new confirmed releases in 2019 were due to increased secondary containment testing (spill buckets, tank sumps, dispenser sumps) by tank owners and operators trying to meet the January 1, 2020 EPA deadline for this required testing. However, the new releases discovered from secondary containment testing are smaller in size, and easier and less expensive to characterize and clean up. The number of open petroleum release events continued to decline before returning to our programmatic low of 581 open releases in January 2021. This was a result of several factors including release prevention and detection efforts, identifying releases earlier, developing better conceptual site models, implementing effective corrective action plans, and continuing to successfully implement our Tier III and Tier IV risk-based closure criteria. OPS continues to lead EPA Region 8 with 355 completed cleanups in calendar year 2020.



## OPS Program Achievements and Improvements

Listed below are achievements and improvements made by the Division to more effectively protect groundwater from contamination associated with releases from petroleum storage tank systems and to protect the solvency of the Petroleum Storage Tank Fund.

### Maintaining our Mission in 2020

In March and April 2020, as we were grappling with the onset of the pandemic, we received immediate feedback from tank owners/operators and contractors that our presence and availability was welcomed and needed, which encouraged our team to stay focused and productive. Work didn't stop for our tank installers and contractors either. Those sectors capitalized on reduced traffic at fuel stations and temporarily lowered prices for equipment and services. Here are some of the challenges we overcame in 2020:

- Working from Home. Many of our staff were already teleworking one day a week, and were set up with virtual private network (VPN) access, so transitioning to working from home went a lot smoother than we could have imagined, and was seamless to our customers..
- Personal Protective Equipment. At the onset of the pandemic, personal protective equipment, such as disinfectant, disposable gloves, and face masks were scarce. However one of our inspectors family was able to sew face masks for each inspector, and we were able to procure other supplies to enable our field inspection staff to continue inspecting safely throughout the pandemic.
- Online Video Meetings and Tech Tools. Web-based meeting software such as Google Meet has allowed our team to stay connected remotely, and we utilized this technology to increase our meeting frequency early in the pandemic in order to share news of the dynamic situation. Also, OPS has been conducting its UST and AST inspections via a mobile app developed in-house for more than two years, and this electronic approach proved to be most effective in 2020.
- Reducing Exposure Risk. OPS took a number of additional on-site steps to help reduce our COVID exposure risk during inspections. It became more important than ever to prepare and plan for the inspection more thoroughly, to ensure tools and equipment are available, and to confirm tank components are accessible. We also attempted to meet with tank owners and contractors outside whenever possible. Further, we temporarily reduced our retail motor fuel device inspections in April and May 2020 in order to avoid too much dispenser nozzle contact, given their heavy public usage.
- Financial Impacts. The State of Colorado has been struggling with the pandemic's impacts to our state budget. OPS is thankful for the healthy partnerships that helped us address the immediate budget concerns in 2020. First, ongoing support from the US EPA via grant renewal and funding has ensured that we can maintain our services and ensure high-risk releases lacking responsible parties are addressed. Second, the Colorado Wyoming Petroleum Marketers Association helped craft legislation to ensure our PetroleumStorage Tank Fund balance was protected.

Through innovation, paperless processes, a team with diverse duties, and strong partnerships, OPS enhanced our role in the storage tank industry and positively impacted release prevention, remediation, and reimbursement in 2020.

### Petroleum Storage Tank Committee Policy 29

All UST systems installed in Colorado after August 2008 are secondarily contained and inherently pose a lower risk of a release to the environment. Releases from these newer secondarily contained tank systems are usually detected earlier, are small in size, and consequently are easier and less expensive to remediate. During 2019, thirty-year warranties began to expire on thousands of USTs across the country that were installed to comply with EPA's 1988 UST rule. In Colorado, almost 30% of the more than 7,100 active USTs are over 30 years old. In an effort to reduce the environmental risk posed by an aging tank population, the Committee authorized Policy 29 to use monies in the Petroleum Storage Tank Fund to provide reimbursement of UST removal costs. This enabled tank owners or operators to proactively make decisions to replace or close aging UST systems, with replacement systems being upgraded to include secondary containment. Reimbursement of UST removal costs from Policy 29 included the following limitations and requirements:

- UST(s) must have been installed prior to August 2008.
- Reimbursement is \$1 per gallon of UST volume removed, up to \$30,000 per facility.
- An owner/operator is limited to up to \$1,000,000 in UST removal reimbursement per year.
- The Committee will allocate no more than \$4,000,000 per year for UST removal reimbursement, subject to available funds.
- Reimbursement is only available to owners or operators of active UST systems, and property owners with abandoned or orphaned tanks, who are eligible to the Fund.
- The entire UST system must be removed on or after January 1, 2019.

During 2020, the Committee approved the reimbursement of approximately \$1.1 million for the removal of 153 aging USTs in accordance with Policy 29.

### 2020 Tank Removal Incentive

The Colorado Revised Statutes [§ 8-20.5-103 (3.5)] authorize monies in the Petroleum Storage Tank Fund (Fund) to be used as incentives to underground or aboveground storage tank owners and operators for significant operational compliance or to upgrade existing tank systems. In addition to Policy 29, the Committee offered an incentive to reduce the financial burden for an owner/operator who discovers confirmed releases while removing and permanently closing their entire UST or AST system. The Committee finds that maximum environmental benefit is achieved when tank systems are removed altogether and not replaced, ending fuel-dispensing activities at the property. Therefore, an owner/operator's maximum operational compliance is achieved through the complete discontinuation of fuel-dispensing activities. In 2019 OPS revised regulations to make storage tank removal costs eligible for Fund reimbursement, which further affirms the benefits of storage tank removal. The incentive is in the form of a waiver of the \$10,000 deductible when an owner/operator seeks reimbursement from the Fund for cleanup of a confirmed release that is determined to be eligible by the Committee. This tank removal incentive had some limitations and requirements including:

- A maximum of 10 facilities per owner/operator, with only one incentive allowed per facility.

- The facility must be in significant operational compliance with release detection and release reporting as identified by OPS and evaluated by the Committee.
- The incentive only applies to systems removed and not replaced.

In addition to the 153 USTs that were removed during 2020, twelve facilities received Committee approval for the Tank Removal Incentive for a total deductible waiver of \$120,000. Since the inception of this waiver and Policy 29, OPS has reimbursed over \$1.9 million to tank owners and operators for the removal of aging petroleum storage tanks. The Petroleum Storage Tank Committee approved an extension of the 2020 Tank Removal Incentive to December 31, 2021.

#### Storage Tank Operational Compliance

The Technical Compliance Rate (TCR) for underground storage tank systems in Colorado remains quite high at 89.9% at the end of the calendar year 2020. A top priority for OPS is to prevent petroleum releases, and maintaining a high compliance rate is the most direct way for our regulated tank owners to help us achieve that goal.

#### National Work Group Representation

OPS's Petroleum Technical Specialist, Bill Hickman, has been confirmed as the newest member of the National Work Group on Leak Detection Evaluations (NWGLDE). NWGLDE is made up of the nation's top storage tank technical experts and its mission is to ensure leak detection systems meet EPA and other regulatory performance standards. We are very proud to have representation on the group, and Bill's involvement will benefit Colorado and the nation as a whole.

#### Tier III and Tier IV Risk-Based Closures

OPS implemented Tier III and Tier IV risk-based closure criteria in October 2014 to allow for regulatory closure of releases with low-risk contamination offsite but no actual risk to receptors. OPS continues to engage with impacted offsite property owners as early as possible in the assessment process to discuss the risks associated with the releases. All Tier III and Tier IV closures are clearly identified on our GIS [Interactive Map Viewer](#) publically available on the OPS website with a link to a fact sheet that summarizes release conditions at the time of closure. In calendar year 2020, OPS completed 32 Tier III and Tier IV closures.

#### Recognized Environmental Professional Program

Recognized Environmental Professionals (REPs) replaced Individual Listed Consultants on January 1, 2018. The purpose of the REP designation is to better align decision-making responsibility between OPS, responsible parties and their environmental consultants by identifying environmental consultants who can demonstrate decision-making experience on releases to the environment. There are currently 89 approved REPs.

A REP is an individual qualified to be the principal decision maker on work related to the environmental assessment, risk characterization, and remediation of OPS petroleum releases based on education and demonstrated decision-making experience. REPs are responsible for:

- Decision-making as it relates to site assessment, risk characterization, remediation, progressing toward regulatory endpoints, budget development and management.

- Signing off on report submittals (i.e., site characterization reports, corrective action plans, monitoring and remediation reports, no further action requests) for release events.
- Communication of regulatory deadlines to both the responsible party and OPS.

This distinction better aligns responsibility between the responsible party, the responsible party's consultant, and OPS, which enables OPS to shift program resources towards continuing education and release prevention.

### REP Continuing Education

The REP Program includes continuing education requirements to maintain active REP status. OPS developed two required REP Continuing Education courses. The "Effective Corrective Action Plan Preparation" course is worth 5 credits and was provided 5 times with the last class being offered virtually during September 2020 to a total of 44 participants. The "Conceptual Site Model Development" course is worth 7 credits and was provided 5 times with the last class being provided virtually during December 2020 to a total of 29 participants. In addition to the two required OPS training courses, REPs are required to obtain 12 continuing education credits from external sources. Examples include webinars, workshops, courses, and conferences related to site assessment and remediation from organizations such as the Interstate Technology and Regulatory Counsel, EPA CLU-IN, and the New England Interstate Water Pollution Control Commission. The first recertification period ended on December 31, 2020 and the Recertification Forms are due by January 31, 2021.

### Petroleum Cleanup and Redevelopment Fund (PCRF) Story Map

OPS staff developed the PCRF Brownfields Story Map and published it on the OPS website. This story map includes information about what a Brownfield is, the story of how OPS got involved with the Brownfields Program, examples of OPS Brownfield success stories, and additional funding incentives provided by the PCRF program for the removal and associated environmental cleanup of legacy petroleum storage tanks.

### Risk-Based Inspections

In an effort to prevent petroleum releases, OPS began varying the frequency of facility inspections in October 2017 and the facility owner/operator's level of involvement during the inspection. The inspection frequency is determined by OPS using facility compliance history, equipment material and age, previous releases, and other criteria to identify higher-risk facilities versus lower-risk facilities. Higher-risk facilities are inspected annually and OPS announces these inspections ahead of time to encourage owner/operator involvement. The OPS Inspector performs a compliance inspection as usual, conducts an onsite compliance records review, and uses the opportunity to educate the owner/operator on compliance tips and discuss the owner/operator's monthly and annual inspections.

### Mobile Inspection App

OPS developed an iPad Inspection to increase inspection efficiency and communication effectiveness for facility inspections. The App was very inexpensive to develop and is fully configurable by in-house staff. Some of the efficiency benefits of the Inspection App include reducing handoffs, eliminating paperwork, and providing instantaneous communication of inspection results and violations to owners/operators.

### Colorado's "SMART" Approach To LUST Cleanups is Featured by EPA

In December 2020 EPA published four new success stories on ways states have accelerated the pace of cleanups and reduced their LUST backlog. "Colorado's RBCA And "SMART" Approach To LUST Cleanups" featured OPS's approach to providing a No Further Action determination in certain situations with offsite property contamination and our treatment train approach to large cleanup efforts.

### Proposed Changes to PAH Groundwater and Soil Standards

The CDPHE Water Quality Control Division has proposed changes to numeric groundwater standards for seven polycyclic aromatic hydrocarbons (PAHs) summarized below.

Polycyclic Aromatic Hydrocarbon	Current Standard (mg/L)	Proposed Standard (mg/L)
Benzo(a)anthracene	4.8 E-6	1.3 E-4
Benzo(a)pyrene	4.8 E-6	1.3 E-5
Benzo(b)fluoranthene	4.8 E-6	1.3 E-4
Benzo(k)fluoranthene	4.8 E-6	1.3 E-3
Chrysene	4.8 E-6	1.3 E-2
Dibenzo(a,h)anthracene	4.8 E-6	1.3 E-5
Indeno(1,2,3-CD)pyrene	4.8 E-6	1.3 E-4

The proposed changes to the PAH standards are orders of magnitude higher than the current standards and are based on updates to the EPA IRIS assessment, which identified benzo(a)pyrene as a mutagen. If approved by the Water Quality Control Commission, OPS will adopt the revised groundwater standards as risk-based screening levels. In addition, OPS will utilize the new standards to adjust the OPS soil risk-based screening levels for these PAHs.

### COSTIS Database Replacement Project

The Colorado Storage Tank Information System (COSTIS) is 20 years old and is in the process of being replaced with a cloud-based Salesforce platform. The new database will be called COSTIS Interactive or COSTIS IA and will have much more functionality for internal and external users. Examples include an enhanced external customer portal with fillable forms and templates for submitting information and reports. This will enable easy access for customers to apply for petroleum storage tank permits, submittal of tank registrations, submittal of applications for reimbursement from the Petroleum Storage Tank Fund and to determine the current status of tanks. Other advantages will include improved services to customers, reduced wait times, direct access to documents within the document management system, and the ability to access and upload inspection information in real time eliminating additional data entry. Internal examples include automated responses to reports such as requests for system tests, site checks, site characterizations, and issuance of No Further Action closure letters, deficiency letters, and notices of violation. The new system is expected to "go live" in April of 2021.